



Attorney Docket No. SPO-590
MAIL STOP RCE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:) Group Art Unit: 1754
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KOMATSU; ISHIDA; IGARASHI;) Examiner: Wayne A. Langel
KONDO; MINAGAWA; SATO; SATO)
)
Serial No. 09/786,427)
)
Filed: March 06, 2001)

For: ZINC-MODIFIED COMPOSITE POLYBASIC SALT, METHOD
OF PREPARING THE SAME AND USE THEREOF

Appendix A

Please amend the following claims according to 37 C.F.R. §
1.121 concerning a manner for making claim amendments.

1. (Currently amended) A composite metal polybasic salt
having a chemical composition represented by the following
general formula (1),



wherein ~~M² is a divalent metal other than Zn~~, M³ is a
trivalent metal, A is a sulfuric acid ion, and a, b, x, y and z
are numbers satisfying the following formulas,

i) $0 \leq a, 0 < b$

ii) $3x + 2(a + b) - y - mz = 0$ (wherein m is a
valency of anion A),

iii) $0.3 \leq (a + b)/x \leq 2.5$,

iv) $1.5 \leq y/(x + a + b) \leq 3.0$, and

v) $4.0 \leq (x + a + b)/z \leq 20.0$, and

n is a number of not larger than 7, exhibiting diffraction peaks at $2\theta = 2$ to 15° , $2\theta = 19.5$ to 24° , a single peak at $2\theta = 33$ to 50° , and a single peak at $2\theta = 60$ to 64° in the X-ray diffraction (Cu- α).

Claims 2-10 (Canceled)

11. (Previously presented) A method of preparing the composite metal polybasic salt of claim 1 by reacting a sulfuric acid salt of a trivalent metal with an oxide, a hydroxide or a sulfuric acid salt of zinc or zinc and magnesium, under the conditions of a pH of from 3.8 to 9.0 and a temperature of not lower than 50°C .

Claims 12-16 (Canceled)

17. (Previously presented) A composite metal polybasic salt according to claim 1, wherein the trivalent metal (M^3) in said formula is aluminum.

Claims 18-23 (Canceled)

24. (Previously presented) A composite metal polybasic salt according to claim 1, which has a laminate asymmetric index (Is) defined by the following formula (2),

$$Is = \tan\theta_2/\tan\theta_1 \quad \text{---(2)}$$

wherein θ_1 is an angle subtended by a peak perpendicular in the X-ray diffraction peak of a predetermined spacing and a peak tangent on the narrow angle side, and θ_2 is an angle subtended by the peak perpendicular at the above peak and a peak tangent on the wide angle side, which is not smaller than 1.5 at a peak of $2\theta = 33$ to 50° .

Claims 25-30 (Canceled)

31. (Previously presented) An additive for resins comprising a composite metal polybasic salt according to claim 1.

32. (Previously presented) A heat insulator comprising a composite metal polybasic salt according to claim 1.

33. (Previously presented) An anion exchanger comprising a composite metal polybasic salt according to claim 1.

Claims 34-37 (Canceled)

38. (Previously presented) A composite metal polybasic salt obtained by ion-exchanging the sulfuric acid anion in the composite metal polybasic salt of claim 1 with at least one anion selected from the group consisting of a carbonic acid ion, silicic acid ion, an organopolycarboxylic acid ion and a phosphoric acid ion.

39. (Canceled)

40. (Previously presented) An additive for resins comprising a composite metal polybasic salt according to claim 38.

41. (Previously presented) A heat insulator comprising a composite metal polybasic salt according to claim 38.

42. (Canceled)

43. (Previously presented) A method of preparing the composite metal polybasic salt of claim 38 by executing the ion-exchange of the sulfuric acid anion of the composite metal polybasic salt of claim 1 in the presence of at least one acid selected from the group consisting of a carbonic acid, a silicic acid, an organocarboxylic acid and a phosphoric acid, or a soluble salt thereof.